

AMENDMENTS TO THE CLAIMS

Claims 1-9 (Canceled)

10. (New) A thermal insulation composite, comprising two metal sheets with a thermally insulating core material composed of molded polystyrene foam, wherein a fire-protection layer which comprises an intumescent composition based on an alkali metal silicate, expandable graphite, or expandable mica has been introduced between the thermally insulating core material and at least one of the metal sheets.
11. (New) The thermal insulation composite according to claim 10, wherein the molded polystyrene foam has a density in the range from 10 to 50 g/l.
12. (New) The thermal insulation composite according to claim 11, wherein the intumescent composition comprises a hydrous sodium silicate.
13. (New) The thermal insulation composite according to claim 10, wherein the metal sheet is composed of steel or of aluminum.
14. (New) The thermal insulation composite according to claim 12, wherein the metal sheet is composed of steel or of aluminum
15. (New) The thermal insulation composite according to claim 10, wherein the metal sheets have a thickness of 1 to 10 mm, the thermally insulating core material has a thickness in the range from 50 to 250 mm and the fire-protection layer has a thickness in the range from 0.1 to 50 mm.
16. (New) The thermal insulation composite according to claim 14, wherein the metal sheets have a thickness of 1 to 10 mm, the thermally insulating core material has a thickness in the range from 50 to 250 mm and the fire-protection layer has a thickness in the range from 0.1 to 50 mm.

17. (New) A process for producing a thermal composite via bonding of two metal sheets and of a thermally insulating core material composed of molded polystyrene foam, which comprises introducing a fire-protection layer which comprises an intumescent composition based on an alkali metal silicate, expandable graphite, or expandable mica between the thermally insulating core material and at least one metal sheet.

18. (New) The process according to claim 17, wherein the core material is coated on at least one surface with an intumescent composition to form the fire-protection layer, and is then adhesive-bonded to the metal sheets.

19. (New) The process according to claim 17, wherein the core material is adhesive-bonded to the metal sheets with an adhesive comprising the intumescent composition.

20. (New) A production of storage buildings or of cold-store buildings which comprises using the thermal insulation composite according to claim 10.